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United States Patent [19][11] **Patent Number:** **6,061,306****Buchheim**[45] **Date of Patent:** **May 9, 2000**[54] **PORTABLE DIGITAL PLAYER COMPATIBLE
WITH A CASSETTE PLAYER**

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Israel; **Dean Chang**, Taipei, Taiwan[57] **ABSTRACT**[21] **Appl. No.:** **09/357,800**[22] **Filed:** **Jul. 20, 1999**[51] **Int. Cl.⁷** **H04B 1/20**[52] **U.S. Cl.** **369/2; 369/11**[58] **Field of Search** 369/2, 1, 6, 9-10,
369/7-8, 11-12, 289, 292, 4; 360/104,
109, 137

A portable audio device is provided and includes (a) a housing shaped as a cassette and insertable into a cassette deck of a cassette player; (b) a digital audio player in the housing, the digital audio player including a memory and an audio chip for storing and subsequently playing digital audio information through at least one speaker; and (c) an emulator in the housing, the emulator operatively communicating with the digital audio player for emulating the digital audio information as analog audio information readable by a magnetic playing head of the cassette player for playing the digital audio information through the cassette player.

[56] **References Cited****U.S. PATENT DOCUMENTS**

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30 Claims, 2 Drawing Sheets